PATENT APPLICATION

ATTORNEY DOCKET NO. __10004566-1__

IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Alex Xin Zhang

Application No.: 09/813,907

Filing Date: 3-21-2001

Title: DEMAND ESTIMATION USING AUCTION PRICE ANALYSIS

Confirmation No.: 4679

Examiner: Bashore A.

Group Art Unit: 1762

Mail Stop Appeal Brief-Patents
Commissioner For Patents
PO Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL OF APPEAL BRIEF

Sir:

Transmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on __2-15-2006__ .

The fee for filing this Appeal Brief is (37 CFR 1.17(c)) $500.00.

(complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.

( ) (a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d) for the total number of months checked below:

( )	one month	$120.00
( )	two months	$450.00
( )	three months	$1020.00
( )	four months	$1590.00

( ) The extension fee has already been filled in this application.

(X) (b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

Please charge to Deposit Account **08-2025** the sum of ___$500.00___ . At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees. A duplicate copy of this sheet is enclosed.

(X) I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Alexandria, VA 22313-1450. Date of Deposit:___4-17-06___
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( ) I hereby certify that this paper is being transmitted to the Patent and Trademark Office facsimile number_____ on _____

Number of pages:

Typed Name: Paul H. Horstmann

Signature:_____

Respectfully submitted,

Alex Xin Zhang

By _____
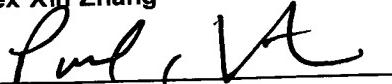
Paul H. Horstmann

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Rev 12/04 (Aplbrief)
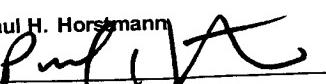
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In Re Application of:	)
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Alex Xin Zhang	) Examiner: Bashore A.
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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Appellant's Brief (Pursuant to 37 C.F.R. §41.37)

Dear Sir:

Appellant/Appellant submits this Appeal Brief in connection with the above-referenced patent application which is on appeal to the Board of Patent Appeals and Interferences.

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REAL PARTY IN INTEREST

The real party in interest in this application is Hewlett-Packard Development Company, L.P.

RELATED APPEALS AND INTERFERENCES

Appellant is unaware of any other related appeals or interferences that may directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

STATUS OF THE CLAIMS

Claims 1-20 stand rejected under 35 U.S.C. §103(a) in view of U.S. Patent No. 6,151,589 of *Aggarwal et al.* (*"Aggarwal"*) and U.S. Patent No. 6,728,689 of *Drissi et al.* (*"Drissi"*).

Appellant appeals the rejection of all of the pending claims 1-20. Claims 1-20 as currently pending are set forth in the attached Appendix.

STATUS OF AMENDMENTS

Appellant is unaware of any amendments filed after the Final Office Action mailed November 15, 2005 which finally rejected claims 1-20.

SUMMARY OF CLAIMED SUBJECT MATTER

Independent claims 1, 8, and 15 are directed to generating a demand estimate for a product in response to a set of auction data. The demand estimate provides an estimate of a likelihood that a consumer will purchase the product. A demand estimate is generated according to claims 1, 8, and 15 by removing from a set of auction data all but a highest bid from each unique bidder and correcting a bias in the auction data caused by a set of characteristics of an auction from which the auction data is obtained.

Independent claim 1 is a method that includes removing from a set of auction data all but a highest bid from each unique bidder in the auction data (See pages 7-8 and Figure 3, step 102 of Appellant's specification) and determining the demand estimate by correcting a bias in the auction data caused by a set of characteristics of an auction from which the auction data is obtained (See page 8 and Figure 3, step 104 of Appellant's specification).

Independent claim 8 is a system that includes a set of auction data (See pages 5-6 and Figure 1, element 10 of Appellant's specification) and a price analyzer that determines an estimate of a likelihood that a consumer will purchase the product by removing from the auction data all but a highest bid from each unique bidder in the auction data and correcting a bias in the auction data (See pages 5-6 and Figure 1, element 12 of Appellant's specification).

Independent claim 15 is a method that includes gathering a set of auction data for a product from an auction web site (See pages 6-7 of Appellant's specification) and removing from the auction data all but a highest bid from each unique bidder in the auction data (See pages 7-8 and Figure 3, step 102 of Appellant's specification) and determining an estimate of a likelihood that a consumer will purchase the product by correcting a bias in the auction data caused by a set of characteristics of an auction corresponding to the auction data (See page 8 and Figure 3, step 104 of Appellant's specification).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

I: Rejection of claims 1-20 as being obvious in view of *Aggarwal* and *Drissi*.

ARGUMENT

I: Claims 1-20 are not obvious in view of *Aggarwal* and *Drissi* because *Aggarwal* and *Drissi* do not disclose or suggest the limitations of independent claims 1, 8, and 15.

Appellant respectfully submits that claims 1, 8, and 15 and claims 2-7, 9-14, and 16-20 which depend from claims 1, 8, and 15 , respectively, are not obvious in view of *Aggarwal* and *Drissi* because *Aggarwal* and *Drissi* do not disclose or suggest the limitations in independent claims 1, 8, and 15 of generating a demand estimate for a product. In addition, *Aggarwal* and *Drissi* do not disclose or suggest removing from a set of auction data all but a highest bid from each unique bidder associated with the auction data as claimed in claims 1, 8, and 15. Moreover, *Aggarwal* and *Drissi* do not disclose or suggest correcting a bias in a set of auction data caused by a set of characteristics of an auction from which the auction data is obtained as claimed in claims 1, 8, and 15.

A. *Aggarwal* and *Drissi* do not disclose or suggest generating a demand estimate for a product as claimed in claims 1, 8, and 15.

Appellant submits that *Aggarwal* and *Drissi* do not disclose or suggest generating a demand estimate for a product as claimed in claims 1, 8, and 15. Instead, *Aggarwal* discloses an online auction (*Aggarwal*, col. 4, lines 16-35) and *Drissi* discloses a data classification system (*Drissi*, col. 2, lines 66-67).

The examiner has stated that

The interval time[1] for an auction encompasses an estimate of a likelihood that a consumer will purchase a product.
(Page 3, Office Action, 11-15-2005)[2].

Appellant respectfully submits that a demand estimate as claimed in claims 1, 8, and 15 is not anticipated by an interval time as taught by *Aggarwal* because a demand estimate as claimed in claims 1, 8, and 15 is an estimate of a likelihood that a consumer will purchase a product[3] whereas an interval time as taught by *Aggarwal* is a time interval between decisions in an auction. (*Aggarwal*, col. 4, lines 16-25 and 56-63). In further contrast, a demand estimate as claimed in claims 1, 8, and 15 is <u>derived from</u> a set of auction data whereas an interval time as taught by *Aggarwal* is a parameter <u>for obtaining</u> auction data. (*Aggarwal*, col. 4, lines 59-60).

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[1] The examiner has not provided a citation for the term "interval time" in the prior art of record. It is submitted that the "interval time" referred to by the examiner is the estimated interval between the auctions decisions 240 shown in Figure 2 and discussed at col. 4, lines 56-63 of *Aggarwal*.

[2] It is submitted that the examiner argues that an interval time between decisions in an online auction as taught by *Aggarwal* anticipates a demand estimate as claimed in claim 1.

[3] Appellant's specification defines a demand estimate as "an estimate of the percentages of consumers that are likely to purchase the product at a set of possible prices for the product." See page 5, last paragraph of Appellant's specification.

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B. *Aggarwal* and *Drissi* do not disclose or suggest removing from a set of auction data all but a highest bid from each unique bidder associated with the auction data as claimed in claims 1, 8, and 15.

Appellant submits that *Aggarwal* and *Drissi* do not disclose or suggest generating a demand estimate by removing from a set of auction data all but a highest bid from each unique bidder associated with the auction data as claimed in claims 1, 8, and 15. This follows from the fact that *Aggarwal* and *Drissi* do not disclose or suggest generating a demand estimate for a product as claimed in claims 1, 8, and 15.

The examiner has stated that

> Aggarwal et al discloses gathering and removing auction data for a product where the gathering includes searching an auction web site (430).

(Page 2, Office Action, 11-15-2005). Appellant respectfully submits that the element 430 of *Aggarwal* referred to by the examiner does not describe gathering auction data or removing auction data by searching an auction web site. Instead, element 430 in Figure 4 of *Aggarwal* refers to calculating a maximum time before expiration of auction bids. (*Aggarwal*, col. 5, lines 47-52).

C. *Aggarwal* and *Drissi* do not disclose or suggest correcting a bias in a set of auction data caused by a set of characteristics of an auction from which the auction data is obtained as claimed in claims 1, 8, and 15.

Appellant submits that *Aggarwal* and *Drissi* do not disclose or suggest generating a demand estimate by correcting a bias in a set of auction data caused by a set of characteristics of an auction from which the auction data is obtained as claimed in claims 1, 8, and 15. This follows from the fact that *Aggarwal* and *Drissi* do not disclose or suggest generating a demand estimate for a product as claimed in claims 1, 8, and 15.

The examiner has stated that

> Drissi et al discloses correcting for bias further by applying a statistical model (col 3, lines 14-25).

(Page 2, Office Action, 11-15-2005). Appellant respectfully submits that correcting a bias as claimed in claims 1, 8, and 15 is not anticipated by the bias correction of *Aggarwal* because claims 1, 8, and 15 recite correcting a bias in a set of auction data caused by a set of characteristics of an auction from which the auction data is obtained whereas *Aggarwal* discloses modifying a set of assumptions (bias) of a learning algorithm in a data classification system. (*Drissi*, col. 2, lines 66-67 and col. 3, lines 14-19).

CONCLUSION

Appellant respectfully submits that the stated rejections cannot be maintained in view of the arguments set forth above. Appellant respectfully submits that all of the claims 1-20 are patentable under 35 U.S.C. §103 over the references cited by the Examiner and requests that the Board of Patent Appeals and Interferences direct allowance of the rejected claims.

Respectfully submitted,

By

Date: _4-17-06_ _____
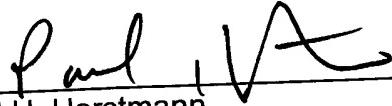
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CLAIMS APPENDIX

1. A computer-based method for generating a demand estimate for a product, comprising:

    removing from a set of auction data all but a highest bid from each unique bidder in the auction data;

    determining the demand estimate by correcting a bias in the auction data caused by a set of characteristics of an auction from which the auction data is obtained using a computer-based mechanism such that the demand estimate provides an estimate of a likelihood that a consumer will purchase the product.

2. The method of claim 1, further comprising gathering the auction data.

3. The method of claim 2, wherein gathering the auction data includes searching an auction web site for the product.

4. The method of claim 2, wherein gathering the auction data includes obtaining the auction data from an auction web site.

5. The method of claim 1, wherein correcting the bias includes applying a statistical model to the auction data.

6. The method of claim 1, further comprising generating a graph of the demand estimate.

7. The method of claim 1, further comprising generating a table containing the demand estimate.

8. A system for generating a demand estimate for a product, comprising:

    a set of auction data including a set of bids for the product;

    price analyzer that determines an estimate of a likelihood that a consumer will purchase the product by removing from the auction data all but a highest bid from each unique bidder in the auction data and correcting a

bias in the auction data caused by a set of characteristics of an auction from which the auction data is obtained.

9.   The system of claim 8, further comprising means for gathering the auction data.

10.   The system of claim 9, wherein the means for gathering the auction data includes means for searching an auction web site for the product.

11.   The system of claim 9, wherein the means for gathering the auction data includes means for obtaining the auction data from an auction web site.

12.   The system of claim 8, wherein the price analyzer corrects the bias by applying a statistical model to the auction data to obtain the demand estimate.

13.   The system of claim 8, wherein the price analyzer generates a graph of the demand estimate.

14.   The system of claim 8, wherein the price analyzer generates a table containing the demand estimate.

15.   A method for generating a demand estimate for a product, comprising:
        gathering a set of auction data that pertains to the product from an auction web site using a web client;
        removing from the auction data all but a highest bid from each unique bidder in the auction data;
        determining an estimate of a likelihood that a consumer will purchase the product by correcting a bias in the auction data caused by a set of characteristics of an auction corresponding to the auction data.

16.   The method of claim 15, wherein determining an estimate comprises determining an estimate of a likelihood that a consumer will purchase the product at a set of possible prices for the product.

17.   The method of claim 15, wherein gathering a set of auction data includes searching the auction web site for a product that is similar to the product.

18.   The method of claim 15, wherein correcting a bias includes applying a statistical model to the auction data.

19.   The method of claim 15, further comprising generating a graph of the demand estimate.

20.   The method of claim 15, further comprising generating a table containing the demand estimate.

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.